Application No.: 10/596,243

AMENDMENTS IN THE CLAIMS:

1. (Currently Amended) A method for production of an α -glucan from a β -1,4-glucan cellobiose, comprising:

reacting a solution containing a β -1,4-glucan cellobiose, a primer, a source of phosphoric acid, β -1,4-glucan cellobiose phosphorylase, and α -1,4-glucan phosphorylase to produce an α -glucan; wherein the step of reacting the solution to produce the α -glucan comprises removing glucose produced as a byproduct from said solution simultaneously with production of said α -glucan.

Claims 2-5. (Cancelled)

- 6. (Currently Amended) The method according to claim 1[[5]], wherein said solution further contains glucose isomerase or glucose oxidase.
- 7. (Currently Amended) The method according to claim 1[[5]], wherein said solution further contains glucose oxidase and mutarotase.
- 8. (Original) The method according to claim 7, wherein said solution further contains catalase or peroxidase.
- 9. (Original) The method according to claim 1, wherein said source of phosphoric acid is inorganic phosphoric acid, glucose-1-phosphate, or a mixture of inorganic phosphoric acid and glucose-1-phosphate.
- 10. (Original) The method according to claim 1, wherein the concentration of said source of phosphoric acid is 1mM to 50mM.
- 11. (Original) The method according to claim 1, wherein said α -glucan is amylose.